



“Research Pathways to the Next Generation of Equipment for Substations and the Grid”

Top Cross-Cutting and Additional Needs

- #1 – Create sensors that apply to cable and substation diagnosis
- #2 – Develop methods that translate massive data to instructions
- #3 – Evaluate material science support for all aspects of GridWorks
- #4 – Plan GridWorks demonstration to repair storm damage
- #5 – Explore new technology for solid state switches
- #6 – Evaluate latency issues in collecting data from long lines



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- #7 – Build devices with physical and cyber security incorporated
- #8 – Coordinate software and communications interoperability
- #9 – Design the architecture for a new grid with available equipment
- #10 – Design security sensors that apply throughout system
- #11 – Model and measure the cost of not changing the system